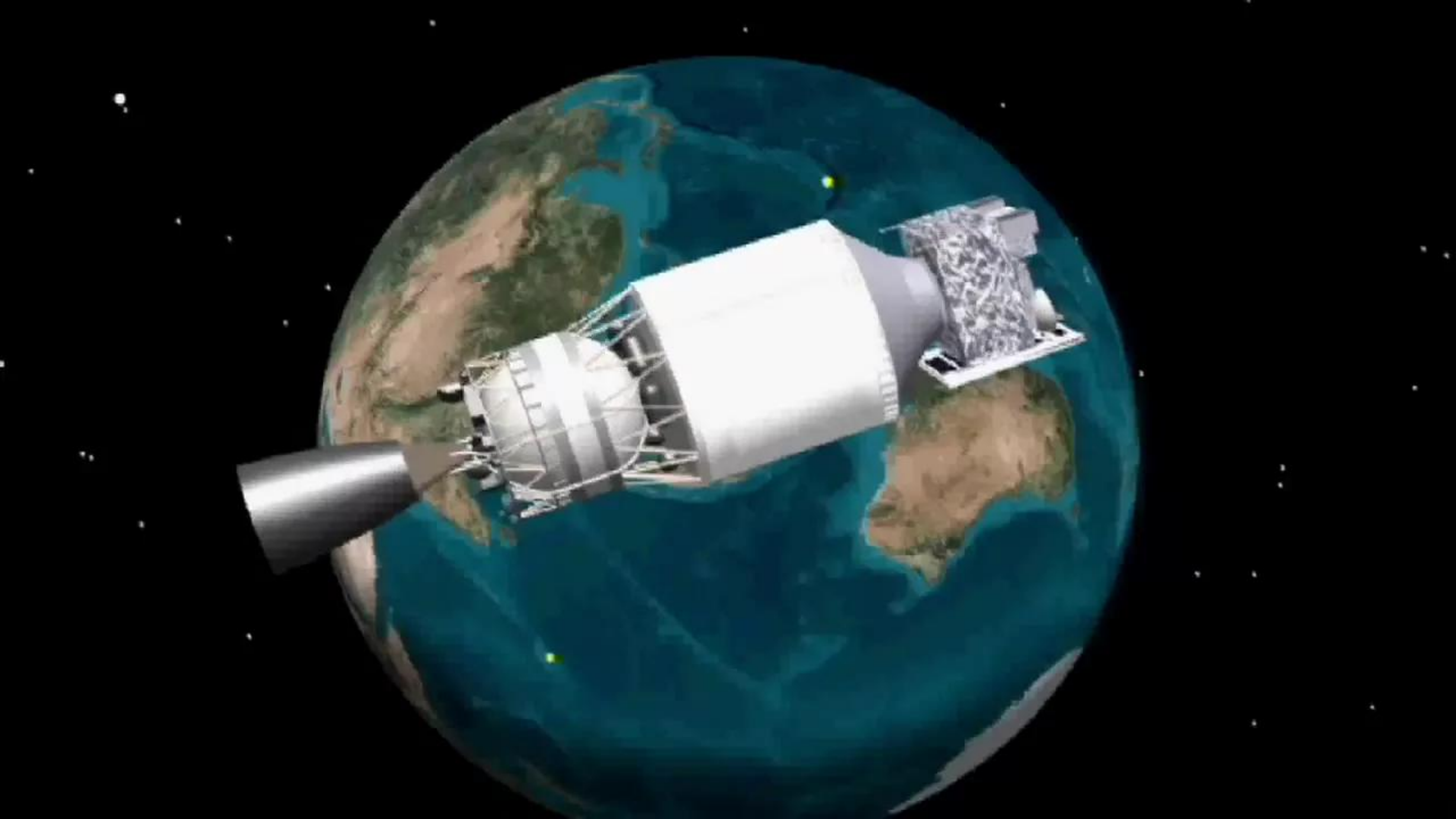

1
00:00:05,440 --> 00:00:03,440
[Music]

2
00:00:08,600 --> 00:00:05,450
we're at Cape Canaveral Air Force

3
00:00:11,600 --> 00:00:08,610
Station and this behind me is launch pad

4
00:00:14,750 --> 00:00:11,610
37 just in a few days NASA will launch

5
00:00:17,390 --> 00:00:14,760
the next go satellite on the Delta 4

6
00:00:19,700 --> 00:00:17,400
rocket right next to me is Russel help

7
00:00:22,400 --> 00:00:19,710
he's the chief engineer for the United

8
00:00:25,040 --> 00:00:22,410
Launch Alliance for the Delta 4 rocket

9
00:00:27,859 --> 00:00:25,050
so Russ could you please point to the

10
00:00:29,090 --> 00:00:27,869
key element that we see from here and

11
00:00:32,630 --> 00:00:29,100
explain what we see

12
00:00:34,430 --> 00:00:32,640
sure Sylvia behind us here we have the

13
00:00:37,130 --> 00:00:34,440

bottom end of the first stage which is

14
00:00:39,530 --> 00:00:37,140
this large orange round cylinder here

15
00:00:44,600 --> 00:00:39,540
and attached to it are two solid rocket

16
00:00:46,670 --> 00:00:44,610
motors that will all light off on t0 on

17
00:00:48,289 --> 00:00:46,680
the day of launch and that was going to

18
00:00:50,390 --> 00:00:48,299
be my next question what is it that

19
00:00:52,729 --> 00:00:50,400
we're going to see on the day of launch

20
00:00:54,110 --> 00:00:52,739
and the day of launch up above the we

21
00:00:55,910 --> 00:00:54,120
have these swing arms that are going to

22
00:00:57,799 --> 00:00:55,920
pull back from the rocket before it

23
00:00:59,960 --> 00:00:57,809
leaves the pad and then you will see a

24
00:01:02,240 --> 00:00:59,970
bunch of flame coming out the back end a

25
00:01:04,340 --> 00:01:02,250
lot of smoke and then gradually the

26
00:01:06,950 --> 00:01:04,350
rocket will lift off and go straight up

27
00:01:08,630 --> 00:01:06,960
into the air so after launch how long

28
00:01:10,580 --> 00:01:08,640
before the spacecraft is actually

29
00:01:12,800 --> 00:01:10,590
separated from the launch vehicle Oh

30
00:01:15,349 --> 00:01:12,810
from the time we liftoff it's a little

31
00:01:17,480 --> 00:01:15,359
over four hours before the spacecraft

32
00:01:20,120 --> 00:01:17,490
will be set free from the rocket so it's

33
00:01:21,859 --> 00:01:20,130
it's a fairly long ride how do you

34
00:01:24,020 --> 00:01:21,869
actually test the launch vehicle to make

35
00:01:26,899 --> 00:01:24,030
sure that it places the spacecraft in

36
00:01:28,999 --> 00:01:26,909
its orbit well it gets a lot of testing

37
00:01:31,249 --> 00:01:29,009
at the factory but the final testing all

38
00:01:33,649 --> 00:01:31,259

gets done here at the launch site and we

39
00:01:35,810 --> 00:01:33,659
test all the systems out the electrical

40
00:01:37,760 --> 00:01:35,820
the hydraulic the pneumatic systems to

41
00:01:40,849 --> 00:01:37,770
make sure they're working we also put

42
00:01:42,349 --> 00:01:40,859
the fuels onboard prior to the day of

43
00:01:44,810 --> 00:01:42,359
launch to make sure that's all working

44
00:01:48,410 --> 00:01:44,820
correctly if you were to use simple

45
00:01:50,179 --> 00:01:48,420
comparisons how how tall is this rocket

46
00:01:52,999 --> 00:01:50,189
if if you were to just explain to

47
00:01:54,349 --> 00:01:53,009
anybody on the street well anybody on

48
00:01:56,779 --> 00:01:54,359
the street I think has seen a space

49
00:01:58,819 --> 00:01:56,789
shuttle so this rocket is a little over

50
00:02:01,459 --> 00:01:58,829
200 feet tall they compared to a shuttle

51
00:02:03,679 --> 00:02:01,469
which is about 185 feet tall so it's a

52
00:02:05,749 --> 00:02:03,689
little taller than a shuttle but not as

53
00:02:07,550 --> 00:02:05,759
fat as a shuttle so I guess we could

54
00:02:10,700 --> 00:02:07,560
call you a rocket scientist how long

55
00:02:12,770 --> 00:02:10,710
have you been doing this oh I've grown

56
00:02:13,890 --> 00:02:12,780
into being a rocket scientist over 25

57
00:02:15,839 --> 00:02:13,900
years now it's

58
00:02:18,179 --> 00:02:15,849
been working on various different

59
00:02:20,309 --> 00:02:18,189
rockets and missiles over the course of

60
00:02:22,710 --> 00:02:20,319
my career and it's been a great life

61
00:02:24,600 --> 00:02:22,720
this needs be really exciting for you

62
00:02:26,940 --> 00:02:24,610
we're close to launch how does it feel

63
00:02:29,280 --> 00:02:26,950

this feels very exciting you know they

64
00:02:30,869 --> 00:02:29,290
finally get to the launch day to finally

65
00:02:33,330 --> 00:02:30,879
get here after all the hard work that

66
00:02:34,979 --> 00:02:33,340
everybody's put into it always a little

67
00:02:36,869 --> 00:02:34,989
anxiety because you're not sure that

68
00:02:38,640 --> 00:02:36,879
it's going to work perfectly but you've

69
00:02:39,929 --> 00:02:38,650
done everything you know how to do to

70
00:02:42,479 --> 00:02:39,939
make sure that it's going to work

71
00:02:44,970 --> 00:02:42,489
thank you rest so for more information

72
00:02:49,470 --> 00:02:44,980
about the Gozo mission for some cool

73
00:02:53,360 --> 00:02:49,480
videos and animation visit WWN a COV